



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Lorin R. DeBonte, et al.

Art Unit : 1638

Serial No.: 09/771,904

Examiner: Elizabeth F. McElwain

Filed

: January 29, 2001

Title

: FATTY ACID DESATURASES AND MUTANT SEQUENCES THEREOF

Commissioner for Patents Washington, DC 20231

AMENDMENT AND RESPONSE

In response to the Communication of January 7, 2003, please amend the application as follows:

In the specification:

Replace the paragraph beginning at page 12, line 21, with the following rewritten paragraph:

-- Another region suitable for a mutation in a delta-12 desaturase sequence contains the motif KYLNNP (SEQ ID NO:64) at nucleotides corresponding to amino acids 170 to 175 of the Brassica desaturase sequence. An illustrative example of a mutation in this region is a Leu to His substitution, resulting in the amino acid sequence (Table 4) KYHNNP (SEQ ID NO:53, compare wild-type Fad2-F amino acids 170-175 of SEQ ID NO:14 to mutant Fad2-F amino acids 170-175 of SEQ ID NO:16). A similar mutation in other Fad-2 amino acid sequences is contemplated to result in a non-functional gene product. (Compare SEQ ID NO:6 to SEQ ID NO:8). --

In the claims:

Please amend claims 2, 5, 17, 39, 42, and 44-46 as follows:

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

February 7, 2003

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